

## THE UNIVERD SHAVES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

# IXHE Technology Holding Company, TEC

PLOCORS, THERE HAS BEEN PRESENTED TO THE

### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HERS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY TARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC SUPLEMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE AIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSE. OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE TO USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT ABY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'06CX2I2R'

In Testimony Wherest, I have hereunto set my hand and caused the seal of the Unit Unriety Protection Office to be affixed at the City of Washington, D.C. this twenty-ninth day of September, in the year two thousand and six.

Secretary of Agriculture

Commissioner
Plant Varioty Protection Off

Plant Variety Protection Office Agricultural Marketing Service

William V. Hugie

CAPACITY OR TITLE

June 10,2005

DATE

Don L. Keim

**Cotton Breeder** 

CAPACITY OR TITLE

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO (1) completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check paybable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieites, lines, or clones used, and the breeding method
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of realted varieties:
  - (1) Identify these varieties and state all differences objectively;
  - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 23. CONTINUED FROM FRONT (Please give the country, date of filling or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)
  ROUNDUP READY® cotton:

These seeds are covered under U.S. Patents 5,633,435; 5,352,605; 5,530,196; 5,188,642; 4,940,835; 5,717,084; 5,728,925; and 5,804,425.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed/ls-sd.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to repond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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5&T -470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete.

#### **EXHIBIT A**

# DELTA AND PINE LAND COMPANY'S APPLICATION FOR 03X179R '06CX2I2R'

#### **ORIGIN AND BREEDING HISTORY**

#### 1. GENEALOGY

03X179R is a selection derived from the cross 5415-1445-12 x DP 5409. The 5415-1445-12 parent was derived from a backcross involving COKER 312 LINE 1445 as a donor parent and DP 5415 as a recurrent parent. LINE 1445 was developed by the MONSANTO COMPANY using Recombinant DNA techniques to introduce a resistant version of the gene EPSPS which encodes the enzyme: 5-enolpyruvylshikimate-3-phosphate synthase (EPSPS). This modified EPSPS was originally isolated from the common soil borne microorganism *Agrobacterium sp.* strain CP4 and confers to LINE 1445 resistance or tolerance to the herbicide glyphosate [formulation of glyphosate, N (phosphonomethyl) glycine] commercialized under the trade name ROUNDUP.

Development of 03X179R occurred in the Midsouth Cotton Research program of Delta and Pine Land Company. A single F8 progeny row was bulked in 2001 to form the line designated 951095-8043-001 and was later designated 02X25R-001. After initial evaluation and increase the line was given the experimental designation 03X179R in 2003.

#### SELECTION AND MULTIPLICATION

Year	Location	Generation_	Selection
1995	Scott, Ms	F0	Cross made
1995/96	Winter nursery - Puerto Rico	F1	Selfed bulk
1996	Scott, Ms	F2	Bulked
1996/97	Winter nursery – Puerto Rico	F3	Selfed bulk
1997	Scott, Ms	F4	Modified bulk
1998	Scott, Ms	F5	Single plant selected
1999	Scott, Ms	F6	Progeny row bulked
2000	Breeder's Increase - Scott, Ms	F7	Plants screened for RR and selfed
2001	Purification Increase - Scott, Ms	F8	Progeny row bulked
2002	Transgenic Increase - Scott, Ms	F9	Bulked
2003	Transgenic Increase - Scott, Ms	F10	Bulked
2003/2004	Research Increase - Costa Rica	F11	Bulked
2004	Foundation Increase - Scott, Ms/Eloy,	Az F12	Bulked
2005	Production Increase - Beltwide	F13	

Selection criteria used in the F2 through F6 generations included screening plants for resistance to glyphosate herbicide application. Selection criteria used in the F5 generation included selection for agronomic traits (plant type, plant maturity, plant height and storm resistance), lint percent and fiber quality traits (micronaire, length and strength). In the F6, lint yield was added to the selection criteria. In the F7 generation, plants were screened for presence of the 1445 gene insertion and leaf pubescence. In the F8, a single progeny row was selected on the basis of agronomic and fiber quality traits, as well as presence and homozygosity of the 1445 gene insertion.

### STATEMENT ON UNIFORMITY AND STABILITY

03X179R has been observed every generation since 2001 and has shown to be uniform and stable. Less than 2% of the plants do not contain the gene insertion 1445.

200500274

#### **EXHIBIT B**

# DELTA AND PINE LAND COMPANY'S APPLICATION FOR 03X179R '06CX2I2R'

#### STATEMENT OF DISTINCTNESS

03X179R is a picker-type upland variety. The picker-type varieties as a group are distinguished from stripper varieties primarily by a more open or loose boll type. The picker-type varieties are distinguished from Acala-type varieties primarily by earlier maturity, higher heat tolerance, shorter fiber length and lower fiber strength.

03X179R is different from many other picker-type varieties in that its plants possess the 1445 gene insertion developed by the MONSANTO COMPANY. The gene insertion 1445 causes plants to be tolerant to the herbicide ROUNDUP (glyphosate).

DP 5415 RR was used as the most similar variety because it has many characteristics in common with 03X179R, including the 1445 gene insertion. Also, a selection of DP 5415 RR was used as a parent in the cross from which 03X179R was derived. In comparing 03X179R to DP 5415 RR, the most distinguishing characteristic is lint percent. 03X179R also differs from DP 5415 RR in fiber micronaire, fiber length, fiber uniformity ratio, fiber strength, fiber elongation, maturity and lint index.

Novelty of 03X179R is claimed on the following characteristics, for which there are significant differences from the comparison variety, at the 5% level of probability or less.

Trait	03X179 R	RR	Probability	Reference Table
Lint percent	39.19	36.58	< 0.0001	1
Fiber micronaire	4.44	4.30	0.0028	1
Fiber length	1.159	1.128	< 0.0001	1
Fiber uniformity ratio	83.57	82.67	< 0.0001	1
Fiber strength	32.35	30.97	< 0.0001	1
Fiber elongation	12.58	13.70	<0.0001	1
Maturity	81.0	73.8	0.0049	1
Lint Index	7.12	5.99	0.0323	1

#### Supporting Tables:

<u>Table</u>	<u>Test</u>	Years	Locations
1	Head to Head Comparisons	2003, 2004	34 tests - Beltwide
2	PVP Trial	2004	Scott. Ms
3	PVP Trial - Final Plant Map	2004	Scott, Ms

Chicagning   Chi	Page	Table 1.		Head to head comparisons of 03X179R with DP 5415 RR $O_{CX2L2\beta^L}^{t}$	of 033	7179R	with I	)P 541:	S RR								;							
Page	Figure   Figure   Chip/Country   State   Sta	.,				Lint Tu	irnout	Micro	aire	Lengt	-ti	Uniformit Ratio		trength	Elong	gation	Plant H	eight	Matur	, t <u>i</u>	Seed In	dex	Lint Ind	ex
Signature   Sign	SHYOULD   SHY   SC   SH   A2   A2   A1   B   L15   B46   S16   B43   B50   B44   B46   B			City/County	State			03X179 j				3X179 DP 5 R RI				DP 5415 RR	03X179 1		3X179 D		ICI 671X8		3X179 DP R	DP 5415 RR
2 33780223	2 333M20219 BB GCA 404 274 4 4 0 11.5 11.8 18.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8			HV	SC	39.7	38.1	4.2	4.2								102.2	107.0		72.5				
2 33NPOZZZZ WC GO A 42.8 412 42.4 42 113 113 855 813 310 234 12 135 185 195 185 185 185 185 185 185 185 185 185 18	2 33WC0223 WC GO		1	BB	GA	40.4	37.4	4.4	4.0	-				-	├-		103.5	111.1						
2 33WC0233 WU GGA 42.2 44.3 45.4 41.117 11.2 85.2 83.8 47.0 12.8 19.1 81.1 81.1 81.1 81.1 81.1 81.1 81	2 33WC0223 WVC GA 422 445 418 118 118 518 518 319 320 124 91 691 891 971 838 348 348 348 348 348 348 348 348 348		i	TF	GA	42.8	41.2	4.2	4.3		ļ					┼	153.0	152.4		65.0				
2 33NUGDASS NV GG 45.0 95.0 4.6 4.2 119 112 83.1 83.8 94.7 32.2 144 19 19.1 89.5 4 4 31NUGDASS NV GG 45.0 95.0 4.6 4.2 119 112 83.0 30.7 95.0 418 112 93.9 95.0 4 4 31NUGDASS NV GG 45.0 95.2 4.4 4.7 116 114 84.7 83.0 30.5 8.2 12.1 140 95.1 89.9 95.0 4 4 33NUGDASS NV GG 45.0 4.4 4.7 116 114 84.7 85.0 35.0 5.2 12.1 140 95.1 86.0 95.0 12.1 140 95.1 88.0 4 33NUGDASS NV GG 45.0 4.4 4.7 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11	2 338PGM10 253 WU GG 43.0 95.0 4.6 4.2 11.9 11.2 83.1 83.8 34.7 32.2 144 140 92.1 89.5 4 4 338PGM10 253 WU GG 43.0 95.0 4.6 4.2 11.9 11.2 83.2 83.0 30.7 29.3 11.8 11.2 93.4 92.9 18 92.9 4 4 338PGM10 253 WU GG 43.0 93.2 4.5 4.0 4.1 11.0 11.4 84.7 83.0 86.2 32.2 12.1 140 97.1 86.8 83.8 83.0 4 4 338PGM10 253 WU GG 43.2 93.2 4.5 4.0 4.4 11.0 11.4 84.7 83.0 83.2 12.8 12.8 12.0 13.0 93.2 4 338PGM10 253 WU GG 43.2 93.2 4.5 4.0 4.4 11.0 11.1 11.1 11.1 11.1 11.1 1			WC	GA	42.2	40.3	4.5	4.3	-			-			-	104.8	99.1						
A STROCHIS   N.	4 33PPQ417 PB MS 416 99.3 46 47 117 112 813 818 810 72 294 192 93 92 93 98 93 93 93 93 93 93 93 94 94 94 94 94 94 94 94 94 94 94 94 94			WU	ВĄ	43.0	39.6	4.6	4.2				H			14.0	92.1	89.5						
A STREPOLISE   PER No. A. 14.6   39.2   4.4   4.1   116   114   84.7   85.0   35.0   32.0   12.1   14.0   97.   87.1   88.4   33.0   33.0   32.2   13.1   14.0   97.2	A STROPOLIS   P.			NE	ΓĄ	42.5	40.9	4.6	4.7							12.2	93.4	92.9						
A 38MOMONI	A 33W00418   PU   MS   A3 1 39.2   A1			PB	MS	41.6	39.3	4.4	4.1	$\vdash$	$\vdash$				$\vdash$	14.0					8.8	7.9		4.6
A SAWDANIS   WI	A 38W0M41   WI M M M M M M M M M M M M M M M M M M	j	_1	PU	MS	43.1	39.2	4.5	4.3							13.6								
A SAMOMON	A SANAMAO    SM   MS   42,5 40,0 44   41   41   11   110   84,8   82,8   314   131,2   134   91,2   101,7   159   750   95,2   334,000011   CO   A2   432   384   53   51   111   119   84,8   82,8   334   31,1   130   144   643   782   782   780   770   700   1   1   1   1   1   1   1   1   1			WI	ĽĄ	43.7	42.7	5.1	5.1							12.6	2.06	87.1				9.3		7.1
5 33H20533         HI         TX         42.3         3.4         3.4         8.4         8.2         2.0         1.0	5 33HBOSS         HI         Y         4.3         5.1         1.1         1.13         84.5         8.2         3.8.7         1.5         1.3         9.1         3.1         1.4         6.2         7.0 <th< td=""><td></td><td></td><td>SM</td><td>MS</td><td>42.5</td><td>40.0</td><td>4.4</td><td>4.1</td><td></td><td></td><td></td><td></td><td>_</td><td></td><td>13.4</td><td>94.2</td><td>101.7</td><td></td><td></td><td>9.5</td><td>8.2</td><td></td><td>5.6</td></th<>			SM	MS	42.5	40.0	4.4	4.1					_		13.4	94.2	101.7			9.5	8.2		5.6
7 330A0711	7 330COVTII         CO         AZ         434         545         51         119         122         85.5         84.9         35.1         35.1         33.1         31.0         144         64.3         78.2         80.0         77.0           1 BGCPLI NOD         DARLINGTON         SC         4.9         5.5         5.1         11.0         11.0         81.0         83.2         31.7         31.0         61.0         88.2         31.7         31.0         71.0         71.0         88.0         83.2         31.7         31.0         71.0         71.0         88.0         83.2         31.7         31.0         71.0         88.0         83.2         31.7         31.0         71.0         88.0         83.2         31.7         31.0         71.0         88.0         83.2         31.2         31.0         71.0         83.0         83.2			H	Ϋ́Ι	42.3	39.7	3.1	3.5						15.0	15.0	81.3	86.4		75.0				
1 33MA/DTIG         MAA         AZ         393         361         5.5         1117         119         RSB         834         434         12         104         699         RSB         830         717         117           1 E/GCPLI/UZB         BERTILE         NC         414         37.1         51         428         116         689         823         31.7         31.5         70	1         33MAQUIS         MA         AZ         33         36.1         55         53         117         119         88.8         85.4         34.4         34.2         10.4         10.0         69.9         83.9         34.4         34.2         10.4         10.0         89.0         35.0         11.5         10.0         89.0         82.0         31.5         35.0         12.0         99.0         88.8         88.9         34.4         31.5         35.0         11.8         88.9         83.9         32.4         31.5         30.0         70.0			00	AZ	43.2	38.4	5.3	5.1						13.0	14,4	64.3	78.2		0.08				
EGCPL11   FABLINGTON   Sec   49   52   118   116   649   833   317   315   918   9	EGCPLINO   DARLINGTONN NO 941 9 371 51 4 9 52 118 116 849 833 314 315 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9				ΑZ	39.3	36.1	5.5	5.3	-					$\vdash$	12.0	6.69	83.8		77.0				
Dicoplilitizal Berrite   Nic 41.4 371 5.1 4 6.1 40.0 83.0 83.0 32.4 30.0     Escoplilitizal Berrite   Nic 41.4 371 5.1 4.0 1.1 1.1 1.1 1.1 84.7 83.3 33.4 31.2     Escoplilitizal Berrite   Nic 40.4 36.6 4.6 4.4 120 1.18 1.1 84.7 83.3 34.1 32.5     Escoplilitizal Massissippi   Ale 39.7 37.1 4.1 4.1 1.2 1.1 18 84.7 83.3 34.1 32.5     Escoplilitizal Massissippi   Ale 39.7 37.1 4.4 4.1 1.2 1.1 18 84.0 83.0 34.0 33.0     Escoplilitizal Massissippi   Ale 39.7 37.1 4.4 4.1 1.2 1.1 18 81.0 83.0 34.0 33.0     Escoplilitizal Massissippi   Ale 39.7 37.1 4.4 4.1 1.2 1.1 1.2 84.0 83.0 34.0 33.0     Escoplilitizal Massissippi   Ale 39.7 37.1 4.4 4.1 1.2 1.1 1.2 84.0 83.0 34.0 33.0     Escoplilitizal Massissippi   Ale 39.7 37.1 4.4 4.1 1.2 1.1 1.2 83.0 83.0 34.0 33.0     Escoplilitizal Massissippi   Ale 39.7 37.1 4.4 4.2 1.1 1.1 1.1 1.2 83.2 83.0 1.2 82.0 1.2 82.0 1.2 82.0 1.2 83.0 1.2 82.0 1.2	ESCPLIIRCE BERKIE   NO   414   371   51   48   116   110   810   820   319   324   309	2004	1 E6CPL11V01		$_{\rm SC}$	39.7	38.6	6.4	5.2		-								·					
2 BGCPLINGO TITCHON	ESCPLINOZ   THENRY   AL   10   366   4.0   3.6   1.13   1.13   848   833   334   31.2   31.	2004	1 E7CPL11R23		УC	41.4	37.1	5.1	4.8				$\dashv$	-										
2         ESCPLIND2         THFONN         GA         4.04         3.72         4.1         4.0         1.18         1.13         84.7         83.3         33.4         31.2         9.7           2         EGCPELINO2         DINKINNS         GA         4.0.4         4.0.1         1.10         1.10         81.5         83.0         83.6         34.7         9.6         4.6         4.4         1.15         1.12         84.0         83.0         32.3         29.7         9.7         9.7           3         ELCPELINO2         MADISON         TN         38.9         36.6         4.6         4.4         1.15         1.12         84.0         83.0         32.3         29.7         9.7         9.7           4         4.24         3.1         1.12         1.12         8.1         83.0         83.0         9.7         9.7         9.7           4         ECCPLINO2         MADISCINC         MS         38.8         37.4         4.6         4.5         1.17         1.18         83.0         83.0         32.0         9.7         9.7         9.7           4         ECCPLINO2         MARRINGTON         MS         33.2         4.2         1.1	2         ESCPLINO         CA         404         37.2         4.1         4.0         1.18         84.7         83.3         33.4         31.2         9.0           2         EGCPLINO2         ENKINS         CA         40.5         36.6         4.6         4.4         1.12         1.18         83.0         35.3         33.7         9.7         9.7         9.7           3         EICPELIVO2         BADISON         TN         38.9         36.6         4.6         4.4         1.12         1.12         84.0         83.0         32.2         9.7         9.7         9.7           3         EICPELIVO2         MADISON         TN         38.9         36.6         4.6         4.1         1.12         1.12         84.0         83.0         3.0         3.0         9.7<				AL	41.0	36.6	4.0	3.6		-		-	-										
2 EIGCPLI1VO2 JENKINS GA 405 36.6 4.6 4.4 1.20 1.16 83.5 83.3 33.1 32.5	2         EGCPL11VQ2         IBNKINS         GA         40.5         3.66         4.6         4.4         1.10         1.10         83.5         83.3         33.5         93.7         93.7         93.7         93.7         93.7         93.7         93.7         93.0         93.8         93.9         93.9         93.9         93.9         93.8         93.8         93.8         93.8         93.8         93.8         93.8         93.8         93.8         93.8         93.8         93.8         93.8         93.9         93.9         93.8         93.8         93.9         93.8         93.9         93.8         93.9         93.8         93.9         93.8				Q.A	40.4	37.2	4.1	4.0		-	-		$\dashv$										
3 EICPEITIVOI   DE SOTO   MS   374   36.8   4.2   4.3   1.20   1.18   83.0   83.0   35.8   34.7	SilicPelityOi   Die Sotto   MS   374   36.8   4.2   4.3   1.20   1.18   83.0   83.0   35.8   34.7		一		GA	40.5	36.6	4.6	4.4	-			$\dashv$	$\dashv$										
3   ElCPELIVO2   MADISON   TN   38,9   366   46   44   11.5   11.12   84,0   83.0   32.3   29.7	3   ELCPEILIVO2   MADDISON   TN   38.9   36.6   4.6   4.4   1.15   1.15   84.0   83.0   32.3   29.7   37.1   44.4   41.5   1.15   84.0   83.0   32.2   32.7   32.8   32.				MS	37.4	36.8	4.2	4.3	$\dashv$														
3         WZCPEIIMI4 MISSISSIPPI         AR         39.7         37.1         4.4         4.1         1.20         1.19         83.0         84.0         33.0         1.26         1.25         1.21         1.15         83.0         34.0         33.0         1.26         1.25         1.21         1.15         83.0         34.0         35.0         1.26         1.25         1.21         1.15         83.0         34.0         35.0         1.26         1.25         1.21         83.0         37.1         37.1         37.4         4.2         4.1         1.15         83.0         3.2	3         WEACHTIMI4 MISSISSIENT         AR         39.7         37.1         4.4         4.1         1.1.0         11.9         83.0         83.0         33.0         1.26.1         1.26.1         1.1.0         <				Z	38.9	36.6	4.6	4.4	$\dashv$	_		-											
4         4ASMO443         SM         MS         43.9         41.8         5.0         4.9         11.5         11.5         84.3         83.9         30.1         22.9         10.0         11.0         84.3         83.9         30.1         22.7         10.0         11.0         81.0         82.2         11.0         81.0         82.2         32.7         32.	4         44SM0443         SNA         MS         43.9         41.8         5.0         49.1         11.5         84.3         83.9         30.1         28.9         10.6         12.6         12.59         121.0         9.7           4         EZCPLI1VO2         MSARINGYON         MS         38.4         4.5         4.1         1.17         1.15         83.0         83.4         32.7         32.7         9.8         9.3         3.6         1.17         1.15         83.0         82.8         27.4         9.7				AR	39.7	37.1	4.4	4.1	-		$\dashv$	-			-							+	
4         EZCPLI1VOI         SHARKEY         MS         38.8         37.4         4.6         4.5         1.17         1.15         83.0         83.4         32.7         32.7         32.7           4         EZCPLI1VOI         MASHINGTON         MS         38.1         4.2         1.17         1.12         83.5         83.2         30.1         23.0         7         4         ACCPLIANCE         MASHINGTON         MS         37.1         4.2         1.17         1.15         83.5         83.0         30.1         29.0         7         8         7         3         3         3         3         3	4 E2CPL11VOJ         SHARKEY         MS         38.8         37.4         4.6         4.5         1.17         1.15         83.0         83.4         32.7         32.7         9         6         HZCPL11VOJ         WASHINGTON         MS         38.8         37.1         34.7         4.2         1.17         1.15         83.3         30.1         28.2         30.0         9         6         HICLEIO3         FLOYD         TX         29.2         2.8         3.9         3.6         1.17         1.15         87.5         38.0         31.7         20.7         6         1.17         1.15         87.5         38.0         31.7         20.7         6         1.17         1.15         87.5         38.0         31.7         20.7         6         1.17         1.15         87.5         38.0         37.3         30.3         31.11         1.09         82.8         30.9         30.5         30.5         30.1         41.1         41.1         41.1         82.6         82.9         30.5         30.5         43.1         41.1         41.1         41.1         82.6         82.9         30.9         30.5         30.9         30.5         30.9         30.5         30.9         30.5         30			$\neg$	MS	43.9	41.8	5.0	4.9		-	-		$\dashv$	$\dashv$		125.9	121.0		-	9.7	9.3	-	9'9
4         EZCPLII VOZ         WASHINGTON         MS         37.1         34.7         4.2         4.2         1.17         1.12         83.5         82.3         30.1         28.2         9.7         PROPEIGI         RAPIDES         LA         4.10         38.2         4.5         4.2         1.17         1.15         83.5         82.4         81.6         29.7         PROPEIGI	4         EZCPLI1VO2         WASHINGTON         MS         37.1         34.7         4.2         1.17         11.2         83.5         82.3         30.1         28.2         30.1         28.2         4.0         1.17         11.2         83.5         82.3         30.1         28.2         30.0         27.0         9         82.0         82.0         28.0         27.0         9         82.0         82.0         28.2         26.9         9         9         9         9         3.2         1.11         1.09         81.5         80.5         28.8         27.4         9         8         8         2         20.9         2         2         2         2         1.11         1.09         81.5         80.5         28.8         27.4         9         9         9         9         9         9         3         3         1.11         1.09         81.0         82.0         80.9         28.2         26.9         <	- 1	$\neg$	$\neg$	MS	38.8	37.4	9.6	4.5	$\dashv$	+	-	4	+									1	
4 W7CPEIOI         RAPIDES         LA         41.0         38.2         4.5         4.2         11.1         11.0         82.4         81.6         29.4         27.0         PROPEIOI         PRAPIDES         LA         41.0         38.2         4.5         11.1         11.1         11.1         11.0         82.0         82.0         22.0         28.8         27.4         PROPEIOI         PRENO         TX         28.2         28.2         28.8         27.4         PROPEIOI         RESNO         CA         39.9         37.3         5.0         4.8         1.18         1.15         81.0         82.0         82.0         82.0         30.5         PROPEIOI         RESNO         CA         39.9         37.3         5.0         4.8         1.18         1.15         82.0         82.0         82.0         82.0         82.0         30.5         PROPEIOI         RESNO         CA         39.9         37.3         4.0         1.18         1.15         82.0         82.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.0         30.	4 W7CPE101         RAPIDES         LA         41.0         38.2         4.5         4.2         11.2         10.8         82.4         81.6         29.4         27.0         Properation of the pro				MS	37.1	34.7	4.2	4.2		+	-+	-	+								-		
6 HICLEIOZ LUBBOCK TX 292 28.0 3.9 3.6 1.17 1.15 83.7 83.0 31.7 29.7	Figure   F			RAPIDES	ΓΑ	41.0	38.2	4.5	4.2	-	+	+	+	+										
6 HICLELIUS         FLOYID         1X         26.0         2.8         3.2         1.11         1.09         81.0         80.0         28.2         26.9         1.0         R.         2.0         28.2         26.9         1.0         R.         2.0         28.2         26.9         1.0         R.         1.11         1.09         82.0         80.0         28.2         26.9         1.0         R.         1.11         1.00         82.0         80.0         30.5         1.11         1.00         82.0         80.0         30.5         1.0         1.0         80.0         30.5         1.0         80.0         30.5         1.0         80.0         30.5         1.0         80.0         30.5         1.0         80.0         30.5         1.0         80.0         30.0         30.5         1.0         80.0         80.0         30.0         30.0         90.0	6 H2PLCLEIUS         FLOYID         IX         26.0         25.6         2.6         3.2         1.11         1.09         81.2         28.8         27.4         R           6 H2PLCLEIUS         DAWSON         TX         28.7         26.9         3.2         1.11         1.09         82.0         28.8         26.9         R         R         R         R         1.11         1.09         82.0         82.8         26.9         R         R         R         R         1.18         1.18         1.18         1.18         1.18         1.18         1.18         1.18         1.19         82.0         82.0         30.5         R         R         R         R         1.18         1.18         1.18         82.0         30.9         29.7         R			LUBBOCK	X	29.2	28.0	3.9	3.6		+	-+	+	+										
6 HZPLE102         DAWNSON         1X         28.7         26.9         3.2         1.11         1.09         82.0         80.9         28.2         26.9         9         2.6         9         2.6         2.6         9         2.6         2.6         9         2.6         3.0         3.2         1.11         1.19         82.0         82.8         3.0         30.5         9	6 HZPLEIUZ         DAWSON         1X         28.1         26.9         5.2         1.11         1.09         82.0         28.2         2.0.9           7         WICPEIOI         FRESNO         CA         39.9         37.3         5.0         4.8         1.15         1.14         82.0         82.8         30.0         30.5         8.0 <td< td=""><td>I.</td><td>-Т</td><td>FLOYD</td><td>X</td><td>26.0</td><td>25.6</td><td>8.7</td><td>3.2</td><td>+</td><td>+</td><td>+</td><td>-</td><td>-</td><td><math>\downarrow</math></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	I.	-Т	FLOYD	X	26.0	25.6	8.7	3.2	+	+	+	-	-	$\downarrow$									
7         WICPEIOI         FRESNO         CA         39.4         35.3         4.6         3.9         1.15         1.14         82.6         81.8         30.3         29.8         Part Color         Part Co	T WICPEIOL         FRESNO         CA         39.9         37.3         3.0         4.8         1.15         83.0         82.8         30.0         30.2         30.0         30.2         30.0         30.2         30.0         30.2         30.0         30.2         20.0         4.0         1.14         82.6         81.0         30.2         29.7         6         7         82.0         81.0         82.0         81.0         82.0         8		$\neg$	DAWSON	×;	28.7	26.9	3.2	2.5	-	-	+		-								+		
7         WICPELIOZ         KERN         CA         39.4         35.3         4.6         3.9         1.13         1.14         82.6         81.0         30.3         29.7         P         P           16         WACPEIOI         NUECES         TX         32.5         30.1         4.1         1.11         1.06         81.0         82.0         34.0         33.3         R         82.0         34.0         33.3         R         82.0         34.0         33.3         R         82.0         34.0         33.3         R         82.0         82.0         34.0         33.3         R         82.0         83.0         82.0         34.0         33.3         R         82.0         34.0         33.3         R         82.0         34.0         33.3         R         83.0	7         WICPEIIO2         KERN         CA         39.4         35.3         4.6         3.9         1.13         1.14         82.6         81.8         30.3         29.7         PARTAIN           16         WACPEIIO1         WULLIAMSON         TX         32.5         30.1         4.1         1.11         1.06         81.0         82.0         34.0         33.3         8.0         9.0         9.0           16         WACPEIIO1         WILLIAMSON         TX         34.9         31.2         4.5         4.4         1.15         1.13         82.0         34.0         33.3         9.0 <td< td=""><td></td><td></td><td>FRESNO</td><td>5</td><td>39.9</td><td>37.3</td><td>0.0</td><td>8.4</td><td>-</td><td>+</td><td>-</td><td>-</td><td>+</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>+</td><td></td></td<>			FRESNO	5	39.9	37.3	0.0	8.4	-	+	-	-	+									+	
16   HACPEIUI   NUECES   1A   39.5   34.4   1.0   1.0   1.0   81.0   80.0   32.3   30.3	16 W3CPE101 NUECLES 1X 32.5 30.1 4.1 1.11 1.06 81.0 80.0 32.3 30.3			KERN	5	39.4	35.3	4.6	2.5	+		-	+	+								-		
16   W3CPE101   WILLIAMMSON   IX   32.5   30.1   4.1   1.11   1.06   81.0   80.0   32.5   30.3	16   W3CPE101   WILLIAMMSON   IX   32.5   30.1   4.1   1.11   1.05   81.0   80.0   32.5   30.3	1_	_	NUECES	ΥŢ	39.0	0.4°	0.0	0.0		╬			-									-	
10 W4CPE10Z   SAN FALKULO   1X   34.54   31.64   4.54   11.15   11.15   83.0   82.0   34.0   35.35     34.0   35.35     34.0	10   W4CPE10Z   SAN FALKCIO   1X   34.54   31.64   4.6   1.11   1.109   83.0   82.0   34.0   35.54   4.6   4.6   1.11   1.109   83.0   83.0   81.0   31.1   28.7	- 1		WILLIAMSON	X	32.5	30.1	4.1	4.1	+	-	+	-	+										0
16 W4CPEIO3         WHARTON         TX         36.2         33.4         4.6         4.6         1.11         1.09         83.0         81.0         31.1         28.7  <	16 W4CPEIO3         WHARTON         TX         36.2         33.4         4.6         4.6         1.11         1.09         83.0         81.0         31.1         28.7         1         28.7         1.258         1.28         1.00.8         81.0         73.8         9.33           ge         34         34         34         34         34         34         1.258         13.70         97.9         100.8         81.0         73.8         9.33           ence         2.61         0.13         0.031         0.90         1.38         -1.13         -2.9         7.2         0.0           5 - Analysis of Variance         160.699         10.424         59.438         48.964         67.511         38.738         2.115         18.855         5.5           blity of difference - F test         <0.0001	- 1	$\rightarrow$	SAN PATRICIO	×	34.9	31.2	C.4	4.4	+	+	+	+	-								+		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	39.19   36.58   4.44   4.30   1.159   1.128   83.57   82.67   32.35   30.97   12.58   13.70   97.9   100.8   81.0   73.8   9.33   33.4   34   14   12   7   2.03   2.01	300	≱	WHARTON	521	36.2	33.4	4.6	4.6	-	8	_	jir		-86									
34         34         34         34         34         14         12         7         4           2.61         0.13         0.031         0.90         1.38         -1.13         -2.9         7.2         0.65         8           160.699         10.424         59.438         48.964         67.511         38.738         2.115         18.855         5.585         8           <0.0001	34         34         34         34         34         34         14         12         7         4           2.61         0.13         0.031         0.90         1.38         -1.13         -2.9         7.2         0.65         5           160.699         10.424         59.438         48.964         67.511         38.738         2.115         18.855         5.585         5           <0.0001	Average		mundakatakatan da	00169100		36.58	4.44	4.30	3	ž		\$ <u> </u>	35   30.97	\$	74	97.9	100.8	81.0	73.8		8.68	7.12	
2.61         0.13         0.031         0.90         1.38         -1.13         -2.9         7.2         0.65           160.699         10.424         59.438         48.964         67.511         38.738         2.115         18.855         5.585           <0.0001	2.61         0.13         0.031         0.90         1.38         -1.13         -2.9         7.2         0.65           160.699         10.424         59,438         48.964         67.511         38.738         2.115         18.855         5.585           <0.0001	No. Con	nparisons			3	4	3,	54	34		34		34	,	14	1	<b>~</b> 1	7		4		4	
160.699         10.424         59.438         48.964         67.511         38.738         2.115         18.855         5.585           <0.0001	160.699   10.424   59,438   48.964   67.511   38,738   2.115   18.855   5.585	Differen	90			2.0	51	0.1	3	0.03		0.90		1.38	-	.13	-2.	6	7.2		0.65		1.13	
<0.0001	<0,0001         0.0028         <0.0001         <0.0001         <0.0049         0.0991           Values in red are derived from the Analysis of Variance routine in the RXCEL ANALYSIS TOOL PAK add-in         0.1738         0.0049         0.0991	F ratio -	Analysis of Varia	ance		160.	669	10.4	124	59.4	38	48.964		67.511	38	.738	2.1	15	18.85	55	5.58	5	14.33(	
	Values in red are derived from the Analysis of Variance routine in the EXCEL - ANALYSIS TOOL PAK add-in	Probabli	ity of difference -	F test		0.0>	100	0.00	128	0.0°	101	<0.0001		<0.0001	8	1000	0.17	38	0.004	61	0.099	)]	0.0323	

ŝ.

	Table 2. PVP	PVP Trial - 2004 - Scott, MS	004 - 3	Scott,	MS									
											Seed			
		Lint							Cm to	Seeds	Cotton	Lint	Seed	Lint
	Ent Xno	Percent	Mic	Len	Ür	Ţ	E1	Mr	FFB	/boll	/poll	/boll	Index	Index
	7 DP 494 RR	42.3	4.7	1.18	84.3	31.4	10.1	88.3	10.0	28.4	4.9	2.1	10.0	7.4
	21 <b>DP 432 RR</b>	41.0	4.7	1.12	83.4	29.4	12.6	85.8	10.9	32.8	5.4	2.2	9.6	6.7
	22 ST 4793 RR	42.7	4.8	1.10	83.7	28.4	11.8	8.98	9.1	28.6	5.3	2.3	10.7	7.9
ુ ૪	Re 24 03X179R	43,9	5.0	1.15	84.3	30:1	9.01	0.88	10.2	32.1	5.6	2.5	7.6	2.6
900	26 DP 5415 RR	41.8	4.9	1.15	83.0	58.6	12.6	86.8	9.2	29.5	4.7	61	6	9.9
	Mean	42.0	4.8	1.18	9.58	30.8	11.8	87.3	10.4	32.2	5.9	2.5	10.5	7.7
	Ç	1.4	2.8	1.6	8.0	3.1	4.5	0.7	22.3	7.5	6.3	6.4	3.5	3.7
	Lsd .05	0.7	0.2	0.02	0.8	1.1	9.0	0.7	2.9	2.8	0.4	0.2	9.0	0.3
	No. Reps	4	4	4	4	4	4	4	4	4	4	4	4	4
	Heritability	0.98	0.90	88.0	69.0	06.0	0.87	0.70	0.49	0.62	0.81	0.85	0.95	0.94
	R-squared	0.93	0.75	0.72		0.44 0.76	06.0	0.78	0.30	0.36	0.58	99.0	0.87	0.85

m		Table 3. PVP Trial - Scott, MS - 2004 - Plant Map Summary	S - 2004	t - Plant	Map Sun	ımary		
			Total	Nodes	Fruiting		NAWF	Date of
	Ent	Variety	Nodes	to FFB	Branches	HNR	8-Jul	First Flower
	7	DP 494 RR	22.5	5.8	16.8	2.22	7.9	1-Jul
	21	DP 432 RR	21.3	5.9	15.5	2.34	7.7	3-Jul
٠	22	ST 4793 RR	21.7	6.1	15.6	2.24	8.3	2-Jul
LZR	L2R 24	03X179R	22.6	5.7	16.9	2.19	8.3	3-Jul
	26	DP 5415 RR	22.0	6.0	16.0	2.18	8.0	3-Jul
_		Mean	21.8	5.9	16.0	2.21	8.4	3-Jul
	. 7	LSD 0.05	1.5	0.5	1.4	0.14	0.7	SN
		Std. Error	0.5	0.2	0.5	0.05	0.2	1
		Ъ	<.0001	<.0001	<.0001	<.0001	0.000	0.827
		C.V.%	4.9	6.3	6.2	4.5	5.6	1.3
		Planted 4/29/2003				HNR = Hei NAWF= No	HNR = Height to Node Ratio NAWF= Node above white flower	atio te flower
_								

	Explanations:	
Lint Percent =	percentage of the seed cotton that is lint, handpicked samples	
Mic =	micronaire, measure of fiber fineness (high = coarse fiber)	
Len =	fiber length (inches)	
Ur=	uniformity ratio, proportion of uniform length fibers	
T1 =	fiber strength, grams per tex (high = stronger fiber)	
<b>E</b> 1 =	elongation, measure of fiber elasticity, (high = more elastic)	
Mr=	fiber maturity ratio	
Cm to FFB =	cm to first fruiting branch	
Seed/boll =	number of seeds per boll, handpicked samples	
Seed cotton/boll =	weight of seedcotton per boll, handpicked samples	
Lint/boll =	weight of lint per boll, handpicked samples	

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PLANT VARIETY PROTECTION OFFICE
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(COTTON)

### **OBJECTIVE DESCRIPTION OF VARIETY**

**COTTON** (Gossypium spp.)

PVPO	ny recognized color fan ma ed. se standard regional chec Exhibit B.
e space provided. Characte Horticultural Society or an ary characters to be measur THIS APPLICATION: Us ost similar variety used in	NUMBER  5 0 0 2 7 4  eristics described, including recognized color fan mated.  se standard regional checkers in the color fan mated.
e space provided. Characte Horticultural Society or an ary characters to be measur THIS APPLICATION: Us ost similar variety used in	eristics described, including recognized color fan mated.  se standard regional checkers.
Horticultural Society or an ary characters to be measur THIS APPLICATION: Use ost similar variety used in	ny recognized color fan ma ed. se standard regional chec Exhibit B.
ost similar variety used in	Exhibit B.
Variety 3	
ed)	
_A_Central _A_Arizona	A_Blacklands _NT_San Joaquin
meaningful description of	the variety.
Comparison Variety 2	Comparison Variety 3
	_A_Arizona  meaningful description of  Comparison Variety 2

3. GENERAL: (continued)				
Growth: Determinate, Intermediate, Indeterminate	Indeterminant	Intermediate		500274
Leaf Color: Greenish yellow, Light green, Medium green, Dark green	Dark green	Dark green		
Boll Shape: Length less than wid Length equal to width, Length more than width		Length>width		
<b>Boll Breadth:</b> Broadest at base, Broadest at middle	_Broadest at middle	Broadest at middle		
*4. MATURITY: (50 % Open be % open bolls rating taken % open bolls	n on a given date before har		-	
5. PLANT:				
Cm to 1st Fruiting Branch: (from cotyledonary node)	10.2	9.2		
No. of Nodes to 1st Fruiting Bra (excluding cotyledonary node)		6.0		
Mature Plant Height cm: (from cotyledonary node to termin	nal)97.9	100.8		
*6. LEAF: Upper most, fully expa	anded leaf.			
Type: Normal, Sub Okra, Okra, Super Okra	Normal	Normal		
Pubescence: Absent, Sparse, Medium, Dense <u>OR</u> Trichomes/cr (Bottom surface excluding veins)	m <sup>2</sup> Sparse	Sparse		
Nectaries: Present or Absent	Present	Present		
*7. STEM PUBESCENCE: Glabrous, Intermediate, Hairy		Intermediate		
*8. GLANDS: (Gossypol) Absent	t, Sparse, Normal, More Th	an Normal		- 10 A 49 P
Leaf:	Normal	Normal		
Stem:	Normal	Normal		-
Calyx Lobe: (normal is absent)	Normal	Normal		
*9. FLOWER:				,
Petals: Cream, Yellow	Cream	Cream		

Petal Spot: Present, Absent	Absent	Absent	200500274
*10. SEED:			
Seed Index: (g/100 seed, fuzzy basis)	9.33	8.68	
Lint Index: (g lint/100 seeds)	7.12	5.99	
*11. BOLL:			
Lint Percent: Picked Pulled		<u> </u>	
OR			\$
Gin Turnout:  X Picked Stripped	39.19	36,58	
Number of Seeds per Boll	32.1	29.5	
Grams Seed Cotton per Boll	5.6	4.7	
Number of Locules per Boll	4-5	4-5	
Boll Type: (Stormproof, Storm Resistant, Open	n)Open	Open	
12. FIBER PROPERTIES:			
Specify Method (HVI or other):	HVI		
* Length: (inches, 2.5% SL)	1.159	1.128	
* Uniformity: (%)	83.57	82.67	
* Strength, T1 (g/tex)	32.35	30.97	
* Elongation, E1 (%)	12,58	13.70	
* Micronaire:	4.44	4.30	
Fineness (Source)	NT	NT	
Yarn Tenacity: (cN/tex, 27 tex)	NT	NT	
Yarn Strength: (lbs. 22's)	NT	NT	
13. DISEASES: (NT = Not Tested,	S = Susceptible, MS =	Moderately Susceptible, M	R = Moderately Resistant, R = Resistant)
NTAlterna	ria macrospora	S	Fusarium Wilt
NT Anthrac	cnose	NT	Phymatotrichum Root Rot
NTAscoch	yta Blight	NT	Pythium (specify species)
NTBacteria	al Blight (Race 1)	NT_	Rhizoctonia solani

	NTBacterial Blight (Race 2)	NT Southwestern Cotton Rust
	NTBacterial Blight (Race)	NTThielayiopsis basicola
13. DISEASES	S: (continued)	200500274
4	NTDiplodia Boll Rot	_NTVerticillium Wilt
	Other (specify)	
14. NEMATO R = Resistant)	DDES, INSECTS AND PESTS: (NT = Not Tested, S = Susce	eptible, MS = Moderately Susceptible, MR = Moderately Resistant
	_MRRoot-Knot Nematode	_MRReniform Nematode
	_NTBoll Weevil	_NTGrasshopper (specify species):
	_NTBollworm	_NTLygus (specify species):
	_NTCotton Aphid	_NTPink Bollworm
	_NTCotton Fleahopper	_NTSpider Mite (specify species):
	_NTCotton Leafworm	_NTStink Bug (specify species):
	_NTCutworm (specify species):	_NTThrips (specify species):
	_NTFall Armyworm	_NTTobacco Bud Worm
£	Other (specify):	
	MENTS: Present any additional information that cannoguishes your variety.	ot adequately be described in 1 through 13 which significant

03X179R contains s proprietary gene, patented by the Monsanto Company and licensed to D&PL. This gene encodes a protein providing resistance to the herbicide glyphosate (ROUNDUP®).

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STATEMENT OF THE BASIS OF OWNERSHIP		
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
D&PL TECHNOLOGY HOLDING COMPANY, LLC.	03X179R	106CXZIZR'
<ol> <li>ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)</li> </ol>	5. TELEPHONE (Include area code)	6. FAX (Include area code)
P.O. BOX 157 SCOTT, MISSISSIPPI 38772	662.742.4141	662.742.3182
30011, WIGSISSIFF1 30772	7. PVPO NUMBER 20	0500274
8. Does the applicant own all rights to the variety? Mark an "X" in the	ne appropriate block. If no, please expla	in. X YES NO
9. Is the applicant (individual or company) a U.S. national or a U.S. I	based company? If no, give name of c	ountry. YES NO
10. Is the applicant the original owner? X	NO If no, please answer one	of the following:
b. If the original rights to variety were owned by a company(ies)	NO If no, give name of count ), is (are) the original owner(s) a U.S. ba	sed company?
11. Additional explanation on ownership (If needed, use the reverse  03X179R contains a proprietary gene, patente which encodes a protein which provides tolera	ed by the Monsanto Company	y and licensed to D&PL, in cotton cultivars.
PLEASE NOTE:		
Plant variety protection can only be afforded to the owners (not licen	sees) who meet the following criteria:	
<ol> <li>If the rights to the variety are owned by the original breeder, that p national of a country which affords similar protection to nationals of</li> </ol>		
<ol><li>If the rights to the variety are owned by the company which emplo nationals of a UPOV member country, or owned by nationals of a genus and species.</li></ol>		
3. If the applicant is an owner who is not the original owner, both the	e original owner and the applicant must n	neet one of the above criteria.
The original breeder/owner may be the individual or company who di	lirected the final breeding. See Section	41(a)(2) of the Plant Variety Protection

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